Amendments to the Claims: This listing of claims will replace all prior versions, and listings, of claims in the application

Listing of Claims:

1. - 8. (Canceled)

9. (Currently Amended) An emission control system for treating exhaust gas comprising NOx, hydrocarbons, and carbon monoxide produced by a lean burn engine, wherein the exhaust gas which flows upstream to downstream through the emission control system, which system consisting of:

(a) a lean NOx catalyst system consisting of a platinum catalyst for reducing NOx to N_2 present in the lean NOx catalyst system at a loading of < 30g/ft^3, and a ~~support~~ component selected from the group consisting of alumina, a zeolite, ceria, and zirconia;

(b) an oxidation catalyst system consisting of an oxidation catalyst platinum group metal (PGM) for oxidizing hydrocarbons and carbon monoxide~~, present in the oxidation catalyst system at a loading of > 30 g/ft^3~~, and a ~~support~~ component selected from the group consisting of alumina, a zeolite, ceria and zirconia; and

(c) means for injecting hydrocarbon fuel into the exhaust upstream of the lean NOx catalyst system,

wherein the lean NOx catalyst system is disposed upstream of the oxidation catalyst system.

10. (Previously Presented) An emission control system according to claim 9, wherein the lean NOx catalyst system has an activity sufficient to provide a ratio of % NOx conversion to % hydrocarbon conversion of at least 0.2 as measured at a temperature of 230°C, a space velocity of 25000hr^{-1} and a hydrocarbon:NOx input ratio of 3:1 counting the hydrocarbon as equivalent propane.

11. (Previously Presented) An emission control system according to claim 9, wherein the oxidation catalyst system has an activity sufficient to provide a % hydrocarbon conversion of greater than 80% and a % carbon monoxide conversion of greater than 70% as

measured at a temperature of 230°C, a space velocity of 25000hr^{-1} and a hydrocarbon:NOx input ratio of 3:1 counting the hydrocarbon as equivalent propane.

12. (Canceled)

13. (Canceled)

14. (Previously Presented) An emission control system according to claim 9, wherein the oxidation catalyst PGM is platinum.

15. (Previously Presented) An emission control system according to claim 9, wherein the oxidation catalyst PGM is present in the oxidation catalyst system at a loading of about 100g/ft^3.

16. (Canceled)

17. (Canceled)

18. (Canceled)

19. (Canceled)

20. (Canceled)

21. (Currently Amended) A process for the control of emissions from a lean-burn internal combustion engine, which process consisting of:

passing exhaust gases from the engine over a lean NOx catalyst system consisting of

1) a platinum catalyst to reduce NOx to N_2 present in the lean NOx catalyst system at a loading of < 30g/ft^3, and

2) a ~~support~~ component selected from the group consisting of alumina, a zeolite, ceria and zirconia;

passing the product gases exiting from the lean NOx catalyst system over an oxidation catalyst system consisting of

1) an oxidation catalyst platinum group metal (PGM) to oxidize hydrocarbons and carbon monoxide ~~present in the oxidation catalyst system at a loading of > 30 g/ft^3~~, and

2) a ~~support~~ component selected from the group consisting of alumina, a zeolite, ceria and zirconia; and

introducing additional hydrocarbon fuel into the exhaust gas before the exhaust gas contacts the lean NOx catalyst system.

22. (Previously Presented) A process according to claim 21, wherein the lean NOx catalyst system has an activity sufficient to provide a ratio of % NOx conversion to % hydrocarbon conversion of at least 0.2 as measured at a temperature of 230°C, a space velocity of 25000hr^{-1} and a hydrocarbon:NOx input ratio of 3:1 counting the hydrocarbon as equivalent propane.

23. (Previously Presented) A process according to claim 21, wherein the oxidation catalyst system has an activity sufficient to provide a % hydrocarbon conversion of greater than 80% and a % carbon monoxide conversion of greater than 70% as measured at a temperature of 230°C, a space velocity of 25000hr^{-1} and a hydrocarbon:NOx input ratio of 3:1 counting the hydrocarbon as equivalent propane.

24. (Canceled)

25. (Canceled)

26. (Previously Presented) A process according to claim 21, wherein the oxidation catalyst PGM is platinum.

27. (Previously Presented) A process according to claim 21, wherein the oxidation catalyst PGM is present in the oxidation catalyst system at a loading of about 100g/ft^3.

28. (Canceled)

29. (Previously Presented) A process according to claim 21, wherein the step of passing the exhaust gases from the engine over the lean NOx catalyst system are passed over the platinum catalyst at a space velocity below 40000hr^{-1}.

30. (Previously Presented) A process according to claim 21, wherein the step of passing the product gases exiting from the lean NOx catalyst system over the oxidation catalyst system are passed over the oxidation catalyst PGM at a space velocity of 40000-80000hr^{-1}.

31. (Canceled)

32. (Canceled)

33. (Canceled)

34. (Currently Amended) A combination of a lean burn engine and an emission control system, wherein the lean burn engine produces an exhaust gas comprising NOx, hydrocarbons, and carbon monoxide and the emission control system treats the exhaust gas which flows upstream to downstream through the emission control system, said emission control system consisting of:

(a) a lean NOx catalyst system consisting of a platinum catalyst for reducing NOx to N_2 present in the lean NOx catalyst system at a loading of < 30g/ft^3, and a ~~support~~ component selected from the group consisting of alumina, a zeolite, ceria, and zirconia;

(b) an oxidation catalyst system consisting of an oxidation catalyst platinum group metal (PGM) for oxidizing hydrocarbons and carbon monoxide, and a ~~support~~ component selected from the group consisting of alumina, a zeolite, ceria, and zirconia; and

(c) means for injecting hydrocarbon fuel into the exhaust upstream of the lean NOx catalyst system,

wherein the lean NOx catalyst is disposed upstream of the oxidation catalyst.

35. (Previously Presented) The combination of claim 34, wherein the engine is a diesel engine, a lean burn gasoline engine or a direct injection gasoline engine.

36. (Currently Amended) An emission control system for treating exhaust gas comprising NOx, hydrocarbons, and carbon monoxide produced by a lean burn engine, wherein the exhaust gas which flows upstream to downstream through the emission control system, which system consisting of:

(a) a lean NOx catalyst system consisting of a platinum catalyst for reducing NOx to N_2 and having a loading of <30g/ft^3 coated on a surface area-enlarging washcoat;

(b) an oxidation catalyst system consisting of an oxidation catalyst platinum group metal (PGM) for oxidizing hydrocarbons and carbon monoxide ~~present in the oxidation catalyst system at a loading of > 30 g/ft^3~~, and a ~~support~~ component selected from the group consisting of alumina, a zeolite, ceria, and zirconia; and

(c) means for injecting hydrocarbon fuel into the exhaust upstream of the lean NOx catalyst system,

wherein the lean NOx catalyst system is disposed upstream of the oxidation catalyst system.

37. (Previously Presented) A process for the control of emissions from a lean-burn internal combustion engine, which process consisting of:

passing exhaust gases from the engine over a lean NOx catalyst system consisting of a platinum catalyst having a loading of <30g/ft3 coated on a surface area-enlarging washcoat, for reducing NOx to N2;

passing the product gases exiting from the lean NOx catalyst system over an oxidation catalyst system consisting of an oxidation catalyst platinum group metal (PGM) to oxidize hydrocarbons and carbon monoxide; and

introducing additional hydrocarbon fuel into the exhaust gas before the exhaust gas contacts the lean NOx catalyst system.

38. (New) An emission control system for treating exhaust gas comprising NOx, hydrocarbons, and carbon monoxide produced by a lean burn engine, wherein the exhaust gas which flows upstream to downstream through the emission control system, which system consisting of:

(a) a lean NOx catalyst system consisting of a platinum catalyst for reducing NOx to N_2 present in the lean NOx catalyst system at a loading of < 30g/ft^3; a component selected from the group consisting of alumina, a zeolite, ceria and zirconia; and a support;

(b) an oxidation catalyst system consisting of an oxidation catalyst platinum group metal (PGM) for oxidizing hydrocarbons and carbon monoxide; a component selected from the group consisting of alumina, a zeolite, ceria and zirconia; and a support; and

(c) means for injecting hydrocarbon fuel into the exhaust upstream of the lean NOx catalyst system,

wherein the lean NOx catalyst system is disposed upstream of the oxidation catalyst system.

39. (New) An emission control system according to claim 38, wherein the lean NOx catalyst system has an activity sufficient to provide a ratio of % NOx conversion to % hydrocarbon conversion of at least 0.2 as measured at a temperature of 230°C, a space velocity of 25000hr^{-1} and a hydrocarbon:NOx input ratio of 3:1 counting the hydrocarbon as equivalent propane.

40. (New) An emission control system according to claim 38, wherein the oxidation catalyst system has an activity sufficient to provide a % hydrocarbon conversion of greater than 80% and a % carbon monoxide conversion of greater than 70% as measured at a temperature of 230°C, a space velocity of 25000hr^{-1} and a hydrocarbon:NOx input ratio of 3:1 counting the hydrocarbon as equivalent propane.

41. (New) An emission control system according to claim 38, wherein the oxidation catalyst PGM is platinum.

42. (New) An emission control system according to claim 38, wherein the oxidation catalyst PGM is present in the oxidation catalyst system at a loading of about 100g/ft^3.

43. (New) A process for the control of emissions from a lean-burn internal combustion engine, which process consisting of:

passing exhaust gases from the engine over a lean NOx catalyst system consisting of:

1) a platinum catalyst to reduce NOx to N_2 present in the lean NOx catalyst system at a loading of < 30g/ft^3;

2) a component selected from the group consisting of alumina, a zeolite, ceria and zirconia; and

3) a support

passing the product gases exiting from the lean NOx catalyst system over an oxidation catalyst system consisting of:

1) an oxidation catalyst platinum group metal (PGM) to oxidize hydrocarbons and carbon monoxide;

2) a component selected from the group consisting of alumina, a zeolite, ceria and zirconia;

3) a support; and

introducing additional hydrocarbon fuel into the exhaust gas before the exhaust gas contacts the lean NOx catalyst system.

44. (New) A process according to claim 43, wherein the lean NOx catalyst system has an activity sufficient to provide a ratio of % NOx conversion to % hydrocarbon conversion of at least 0.2 as measured at a temperature of 230°C, a space velocity of 25000hr^{-1} and a hydrocarbon:NOx input ratio of 3:1 counting the hydrocarbon as equivalent propane.

45. (New) A process according to claim 43, wherein the oxidation catalyst system has an activity sufficient to provide a % hydrocarbon conversion of greater than 80% and a % carbon monoxide conversion of greater than 70% as measured at a temperature of 230°C, a space velocity of 25000hr^{-1} and a hydrocarbon:NOx input ratio of 3:1 counting the hydrocarbon as equivalent propane.

46. (New) A process according to claim 43, wherein the oxidation catalyst PGM is platinum.

47. (New) A process according to claim 43, wherein the oxidation catalyst PGM is present in the oxidation catalyst system at a loading of about 100g/ft^3.

48. (New) A process according to claim 43, wherein the step of passing the exhaust gases from the engine over the lean NOx catalyst system are passed over the platinum catalyst at a space velocity below 40000hr^{-1}.

49. (New) A process according to claim 43, wherein the step of passing the product gases exiting from the lean NOx catalyst system over the oxidation catalyst system are passed over the oxidation catalyst PGM at a space velocity of 40000-80000hr^{-1}.

50. (New) The combination of claim 35, wherein the engine is a diesel engine.